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APPLICATION N	O. F	TILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,905		01/03/2002	Akira Karasudani	1614.1207	9594
21171	7590	12/05/2006		EXAMINER	
STAAS & HALSEY LLP SUITE 700				AL HASHEMI, SANA A	
1201 NEW YORK AVENUE, N.W.				ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005				2164	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	TA . D . dt Al						
	Application No.	Applicant(s)					
Office Action Comments	10/033,905	KARASUDANI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Sana Al-Hashemi	2164					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 10 Oc	ctober 2006						
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	•						
Disposition of Claims	, , , , , , , , , , , , , , , , , , ,						
	Claim(s) <u>2-4,7-9,12-14,17-19 and 21-32</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	☐ Claim(s) is/are allowed.						
	Claim(s) <u>2-4, 7-9, 12-14, 17-19, 21-32</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s)	_						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate					

#### **DETAILED ACTION**

- 1. This action is issued in responds to applicant's amendment filed 10/10/06.
- 2. Claims 2-4, 7-9, 12-14, 17-19, 21-32 were amended, and 1, 5-6, 10-11, 15-16, and 20 have been canceled. No claims have been added.
- 3. Claims 2-4, 7-9, 12-14, 17-19, 21-32 are pending.

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/10/06 has been entered.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 2-4, 7-9, 12-14, 17-19, and 21-32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Elko et al. (US Patent No. 5,537,574 issued July 16<sup>th</sup>, 1996), in view of Fred et al. (Fred hereinafter) (US Patent No. 5,390,328 issued Feb. 14, 1995).

Regarding Claims 25, 29, 30, 31, and 32, Elko discloses a file device that records a file to an external storage device divided into blocks, comprising:

block allocation means for allocating blocks in the external storage device to record the file in the storage means (Fig. 1, CPC-1, CPC-M, column 5, lines 43-47, and Fig. 2, 206, wherein the expanded storage corresponds to the external storage, Elko);

management information production means for producing management information designating blocks allocated by the block allocation means (Fig. 1, DASD Director, column 5, lines 48-53, Elko); and

storage control means for recording in the blocks in the external storage device the file, after recording the management information and sequence information indicating a sequence in which the file is to be recorded in the blocks (Fig. 1, 101, column 5, 6, lines 61-67, 1-1-4, Elko).however, Elko is silent with respect to the storage being an external storage device, wherein the external storage device is external to the storage control means. On the other hand Frey at Fig. 1, step 110, Col. 4, lines 47-53, discloses a Structured External Storage facility SES the Frey reference is incorporated in the Elko reference and it's analogues art since both arts are in the same endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Structured External Storage in the Elko system. Skilled artisan would have been motivated to address problem of reducing or eliminating

remote requests by a process directed toward a list which is empty. Processes which rely on "polling" techniques--developed to accommodate local queue environments where the costs of periodic polling are low--will suffer unacceptable performance penalties if polling must be done to an external device, and a substantial likelihood exists that a queue may be empty as suggested by Frey Col. 2, lines 48-56.

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Regarding Claims 2, 7, 12, and 17, the combination of Elko in view of Frey discloses a file device, wherein the storage control means attaches information indicating a preceding block and information indicating a size of data to be recorded in a block to the data recorded in the block and records to the storage control means (column 16, lines 40-48, Elko).

Regarding Claims 3, 8, 13, and 18, the combination of Elko in view of Frey discloses a file device, wherein the storage control means updates the management information so that, when a data-unrecorded block occurs among the blocks allocated by the block allocation means when recording the file, the unrecorded block becomes an unused block (column 17, lines 2-8, Elko<sup>1</sup>).

Regarding Claims 4, 9, 14, and 19, the combination of Elko in view of Frey discloses a file device, wherein the storage control means has storage sequence setting means for setting a storage sequence of data that makes up the file, the data that makes up the file being allocated among blocks to be recorded by the block allocation means based on the sequence set by the storage sequence setting means and recorded to the allocated blocks (Fig. 32, 3201, column 51, lines 14-19, Elko).

<sup>&</sup>lt;sup>1</sup> The process of submitting the "cache miss" which indicates the data does not reside in the cache reads on unrecorded block which indicates the block "unused".

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**Regarding Claim 7**, the combination of Elko in view of Frey discloses a computer implemented data access method wherein said recording in the blocks with the file attaches to each block that records with the file, data indicating a preceding block and data indicating a size of data to be recorded therein (column 16, lines 40-48, Elko).

Regarding Claim 21, 22, 23, and 24, the combination of Elko in view of Frey discloses a file device further comprising:

A file accessing unit accessing the blocks in sequential order according to the management information to read the file and, when either the information indicating the preceding block does not indicate the preceding block in the file or the information indicating a size of data recorded in the one or more blocks in not within an actual block size range, stopping the reading of the file and updating the management information so that succeeding blocks become unused blocks (Col. 29, lines 30-39, Elko).

Regarding Claim 26, the combination of Elko in view of Frey discloses at least one computer-readable medium wherein said recording of the sequence information includes recording an identifier of a preceding block in each block after an initial block (Fig. 9, 901, Elko).

Regarding Claim 27, the combination of Elko in view of Frey discloses at least one computer-readable medium wherein said recording further includes recording in each block, size information indicating an amount of data recorded therein (Col. 16, lines 38-49, Elko)

Regarding Claim 28, the combination of Elko in view of Frey discloses a file device, having file readout means, such that when information indicating the preceding block does not indicate the preceding block as a result of the block being accessed in sequence depending on the

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management information, the file being read out, and data being read out from the block, or when information indicating the size of the data recorded in the block is outside the actual block size range, the file readout means halts readout of the file and updates the management information so that subsequent blocks become unused blocks (column 51, lines 20-38, Elko<sup>2</sup>).

### Response to Amendment

Applicant's arguments with respect to claims 2-4, 7-9, 12-14, 17-19, 21-32 have been considered but are most in view of the new ground(s) of rejection.

<sup>&</sup>lt;sup>2</sup> The step of setting the field to 0 since the page can not be located corresponds to unused block, since the block is

### Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is (571) 272-4013. The examiner can normally be reached on 8Am-4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sana Al-Hashemi Patent Examiner

Technology Center 2100

November 17, 2006